

NWC
ESSAY
90-23
ack.

THE UTILITY OF STRATEGIC
NUCLEAR FORCES THROUGH THE PRISM
OF CLAUSEWITZ'S OBSERVATIONS ON WAR.

-By Eric A. Kunsman,
Seminar L.
An Essay for the "Art of War".

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 1990		2. REPORT TYPE		3. DATES COVERED -	
4. TITLE AND SUBTITLE The Utility of Strategic Nuclear Forces Through the Prism of Clausewitz's Observations on War				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) National War College, 300 5th Avenue, Fort Lesley J McNair, Washington, DC, 20319-6000				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT see report					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES 10	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

I. Purpose: This essay examines the utility of strategic nuclear forces through the prism of Clausewitz's observations on war. The absence since 1945 of the actual use of nuclear arms in war has left a void in strategic nuclear theory. Contemporary specialists have, therefore, developed their theories deductively, largely from quantitative analysis which assumes rational behavior. Reaching back 150 years to Clausewitz's writings may help to provide perspective since Clausewitz viewed war more as an art than a science and developed his concepts from empirical observation and historical example.

Certainly much of On War does not apply to the dilemma of nuclear arms--a phenomenon unforeseeable in the 19th century. But nuclear weapons do not exist in a vacuum. Although Clausewitz does not address technological change, he does identify several themes of enduring historical relevance pertinent to the nuclear age: definition of war (or deterrence), the need for war (or deterrence) to serve larger political purposes, the necessity to establish clear policy objectives, center of gravity as the military objective, the role of alliances (or extended deterrence), friction in war (or crisis), and the "remarkable trinity" of government, armed services, and people so critical for the successful execution of war (or deterrence). Understanding these concepts can assist our understanding of the utility of strategic nuclear forces and can serve as a useful benchmark when evaluating recent history and the writings of contemporary nuclear strategists.

II. Background: The role of strategic nuclear forces since August 1945 has been deterrence. The sole use of nuclear forces in war to date to destroy two urban-industrial complexes has firmly established in the public mind a qualitative difference between nuclear and conventional forces. That said, nuclear arms are not just political tools; for many years now they have been designed and deployed to fulfill specific military objectives. Nuclear arms, therefore, have both political and military purpose and meaning.

U.S. deterrence objectives (and our understanding of the predominantly psychological nature of deterrence) have changed over time as the result of the dynamic interplay of political, military, and technological factors: the rapid evolution of technology, international crises, U.S. and Soviet action-reaction nuclear arms deployment decisions, inadequacy of conventional forces, alliance commitments, public acceptability, proliferation concerns, and arms control considerations.

Briefly, key developments since 1945 include:

A. 1945-1949: Dawn of the Nuclear Age

--Only use of atomic bombs in war gave increased support to Douhet and Mitchell's air power theories.

--U.S. conventional forces demobilized even while foreign commitments accepted (Truman Doctrine).

--Cold War begins and Truman Administration adopts containment policy; following Stalin's Berlin Blockade, U.S. incorporates atomic bombs into war plans (asymmetrical strategy).

--Soviets break U.S. atomic monopoly.

3. 1950-59: Grappling with Nuclear Arms

--Korean War and NSC-68 establish limited conventional war as policy options (symmetrical response).

--NATO conventional force goals not met; NSC-162/2 provides impetus both for U.S. forward deployment of forces and tactical nuclear capabilities.

--Eisenhower Administration adopts "Massive Retaliation" strategy and expands heavy bomber force (asymmetrical response); both U.S. and Soviets develop hydrogen bomb.

--By 1956 U.S. accepts "Finite Deterrence" in lieu of continued strategic buildup; tactical nuclear capabilities emphasized (Army, however, prefers increased conventional forces for limited war scenarios).

--Khrushchev's Berlin saber rattling and Soviet ICBM development increase Cold War tension.

--Gaither Report points to vulnerability of U.S. strategic (bomber) forces to Soviet preemptive attack; survivable retaliatory forces emphasized.

By end of decade Golden Age of U.S. nuclear theorists begins; issues debated include:

- Counterforce vs countervalue deterrence
- Deploying secure 2nd strike retaliatory forces
- Credibility of extended deterrence
- Escalation dominance (intra-war deterrence thresholds)
- Utility of tactical nuclear weapons

C. 1960-69: From Crisis to Deterrence

--Kennedy Administration adopts counterforce and flexible response strategies and deploys substantial numbers of ICBMs and SLBMs (symmetrical responses).

--Cuban Missile Crisis: Khrushchev's surreptitious attempt to regain nuclear blackmail leverage rebuffed by overwhelming U.S. strategic nuclear and local naval superiority (successful nuclear crisis management involving reciprocal commitments to dismantle IRBMs located outside of national territory).

--U.S. moves from counterforce to "Mutual Assured Destruction" retaliatory strategy (MAD rejects escalation dominance criterion).

--By end of decade Soviets greatly increasing nuclear forces, especially heavy ICBMs optimized for counterforce preemption.

. 1970-79: Seeking Parity through Negotiations and Technology

--ABM Treaty and SALT IA demonstrate strategic offense-defense linkage; negotiations over strategic arms confirm perception that nuclear arms are qualitatively different than conventional arms.

--U.S. deploy MIRVs to offset Soviet throwweight and SNDV numerical advantages; by end of decade Soviets also MIRVing (increasing U.S. concern over ICBM vulnerability).

--October 1973: Nixon Administration orders nuclear alert to deter Soviets from intervening in Middle East war (asymmetrical response/extended deterrence).

--SALT II negotiations delink offensive from defensive strategic forces, establish equal aggregate limits on missiles and bombers but not throw-weight or warheads.

--"Countervailing Strategy": U.S. (Schlesinger and Brown sought to bolster U.S. retaliation capability and prevent Soviet escalation dominance by increasing targeting flexibility beyond MAD).

E. 1980-89: Strengthening U.S. Strategic Nuclear Leverage through Programs and Negotiations

INF Crisis: During era of strategic parity, Soviet attempt to gain leverage over Western Europe at expense of U.S. extended deterrence credibility fails; SS-20 problem negotiated away after U.S. deploys own theater nuclear forces in Europe.

--U.S. begins deployment of updated triad (ICBM, SLEM, heavy bombers + ALCMs) of strategic forces; public resistance especially strong to new MX ICBM and mobile basing proposals.

--SDI: U.S. negotiating leverage enhanced through advanced technology R and D program; strategic offense-defense linkage reestablished, at least in theory (asymmetrical response).

--START: principle of "50% reductions" and equality in both warheads and delivery vehicles agreed by U.S. and Soviets (although questions raised about whether remaining forces will be more or less vulnerable than at present).

--Both Reagan and Gorbachev agree at summit that "a nuclear war cannot be won and must never be fought."

--Soviets proclaim "No First Use" doctrine, declare defensive strategy (see Defense Minister Yazov's speech at NDU (10/3/89), and admit violation of ABM Treaty.

This list of key developments concerning the utility of strategic nuclear forces during the last 44 years helps establish trend lines showing how deterrence has worked and indicates recurring basic issues worth bearing in mind while reviewing Clausewitz:

- The basic meaning of deterrence as a politico-military act;
- Is extended deterrence worth the risk;
- Are finely tuned counterforce targeting and escalation dominance strategies viable;
- What role should be assigned strategic nuclear forces?

III. Applying Clausewitz to Questions of Nuclear Deterrence:

A. "War is...an act of force to compel our enemy to do our will."

Clausewitz's classic definition of war has relevance to nuclear deterrence if reformulated as: Deterrence is a threatened act of force to compel our enemy to do our will or desist from doing his will (e.g., Nixon's nuclear alert during the 1973 Yom Kippur War to deter Soviet intervention). The direct linkage between deterrence and war (the former substituting for the latter) is thereby easily established through Clausewitz's definition. His image of two wrestlers also helps focus attention on the essential bipolar nature thus far of nuclear deterrence.

B. "War is not merely an act of policy but a true political instrument, a continuation of political intercourse, carried on with other means."

Here again, if "deterrence" is substituted for "war" we have a definition which links war, deterrence, and political policy (i.e. ~~tecraft~~)--the exact intersection at which strategic nuclear

deterrence is designed to function. It is the ability to use strategic nuclear forces for some political purpose which gives these forces meaning and deterrence a political context.

(Kissinger's linkage of ABM and SALT IA negotiations to Berlin issues is an example of the intersection of strategic and political issues.)

C. "No one starts a war--or rather, no one in his senses ought to do so--without first being clear in his mind what he intends to achieve by that war and how he intends to conduct it. The former is its political purpose; the latter its operational objective."

Clausewitz establishes the hierarchy in which strategic nuclear forces function: political leaders and their policies shape military strategy and the role of strategic nuclear forces.

Deterrence is thus a political act. Clausewitz also provides the modern reader with a profound cautionary note which must apply to the use of nuclear deterrence--be very careful and precise about the purpose to be served, the risks of miscalculation are great (Prodie and Schelling would agree).

D. "The aim of war should be...to defeat the enemy....Particular factors can often be decisive... one must keep the dominant characteristics of both belligerents in mind. Out of these characteristics a center of gravity develops, the hub of all power and movement, on which everything depends. That is the point against which all our energies should be directed."

This long quote on Clausewitz's identification of the center of gravity as the decisive point for defeat of the enemy is exceptionally important when pondering the utility of strategic nuclear forces for deterrence. Heated debate in the U.S. has for too long focused on abstract concern about the stabilizing or stabilizing consequences of deploying strategic nuclear forces

either optimized for counterforce or countervalue missions, debate quite divorced from determining what type of force can best deter the Soviets. Clausewitz provides the framework (locating the Soviets' center of gravity) for answering the question. Result: To be effective, U.S. strategic nuclear forces in addition to being optimized to survive a first strike must also be optimized to retaliate against Soviet military forces (the Soviet center of gravity). Thus, the U.S. must design accuracy into SLBMs, heavy bombers/ALCMs, and survivability plus accuracy into its ICBMs.

E. "If two or more states combine against another the result is still politically speaking a single war. But this political unity is a matter of degree...I would, therefore, state it as a principle that if you can vanquish all your enemies by defeating one of them, that defeat must be the main objective of the war."

Clausewitz provides a harsh answer to the question regarding the desirability and risks of extended deterrence: If the U.S. (as a geopolitical island state) must depend on alliances, then extended deterrence is a necessity, risky or not, because a split in an alliance is your enemy's most lucrative target. Perceived U.S. weakness in NATO in the mid-1970s (e.g., ERW fiasco) presented an inviting political target to the Soviets which they exploited with SS-20 deployments. It was only when we replied in kind that the Soviets backed down.

F. "Everything in war is very simple, but the simplest thing is difficult. The difficulties accumulate and end by producing a kind of friction that is inconceivable unless one has experienced war."

Clausewitz provides a cautionary note to modern strategists who work with abstract mathematical models: Real world crises are not antiseptic, Murphy's Law applies. Fine-tuning escalation

dominance theories (Kahn) or developing a complex "Countervailing Strategy" (Brown) do not sound strategic deterrence planning make. Strategic nuclear forces have deterrence utility to the extent that they are perceived by one's enemy of being able to execute a viable war plan. In short, develop effective forces and "simple" retaliatory strategy focused on destruction of a substantial portion of the Soviet armed forces and supporting infrastructure. Using strategic nuclear forces to attempt to convey subtle intrawar escalation dominance messages is not a workable option.

G. "As a total phenomenon its dominant tendencies always make war a paradoxical trinity--composed of primordial violence, hatred, and enmity, which are to be regarded as a blind natural force; of the play of chance and probability within which the creative spirit is free to roam; and of its element of subordination, as an instrument of policy, which makes it subject to reason alone."

Clausewitz's "remakable trinity" constitutes a social compact between government, the armed services and people. The government established the political purpose, the military provides the means for achieving the political end, and the people provide the will. All three are equally indispensable for strategic nuclear deterrence to work. Too often modern theorists neglect the third component--the people. The long sorry history of inability to obtain political consensus to mobile basing options for the MX amply justifies the continuing relevance of Clausewitz's observation.

IV. Conclusion: This paper has been difficult to write but I deliberately chose Clausewitz in order to search for enduring principles which can aid our understanding of nuclear deterrence and the utility of strategic nuclear forces.

Having become more comfortable over the years with reading contemporary nuclear strategists' frequently abstract quantitative tracts, Clausewitz was welcome relief. Whether or not he speaks to us from the ages or only was a vehicle for expressing my own hard-headed biases about strategic nuclear issues is for the reader to judge.

I close with a quote from Kissinger written after his period of public service:

"To expect the Soviet leaders to restrain themselves from exploiting circumstances they conceive to be favorable is to misread history. To foreclose Soviet opportunities is thus the essence of the West's responsibility. It is up to us to define the limits of Soviet aims."
(White House Years, p. 119)

Strategic nuclear arms have utility to the extent they are able to provide for deterrence. To do so they must possess effective military capability. Clausewitz's classic observations on the nature of the art of war provide valuable insight into how to think about deterrence and the role of strategic nuclear arms.